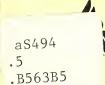
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Biotechnology Notes

May 1988

Biotechnology Notes, a compilation of news events, program activities, and meeting announcements, is prepared for members of the Committee on Biotechnology in Agriculture by the Office of Agricultural Biotechnology.

FSIS SCHEDULING MEETING--Decisions concerning the food use of some transgenic animals, such as chickens that resist Marek's disease, do not clearly fall under the jurisdiction of any regulatory agency. These regulatory gray areas will be the topic of discussion at an upcoming meeting between FSIS, APHIS, and the Food and Drug Administration.

APHIS APPROVES TWO FIELD TRIALS DURING APRIL—APHIS issued two permits last month for field tests using genetically engineered tomato plants. E. I. Du Pont de Nemours & Co, Inc., Wilmington, Del., will begin testing a tomato plant that tolerates sulfonylurea herbicides. Another permit, issued to Monsanto Agricultural Co., St. Louis, Mo., allows field tests of tomatoes that resist certain insect pests, such as the tomato hornworm, the cabbage looper, or the corn rootworm. When a susceptible insect eats the plant, a toxin is activated and the insect is killed.

In other APHIS news, the agency has allowed certain genetically engineered microorganims to be moved interstate between research facilities without a permit under specified conditions that would not present a risk of plant pest introduction or dissemination. The exempted microorganisms include E. coli, genotype K-12 and its derivatives, sterile strains of Saccharomyces cerevisiae, or asporogenic strains of B. subtilis. The conditions would ensure that they are adequately physically contained and would not survive in the environment.

ERS ANIMAL GROWTH HORMONE STUDY IN CLEARANCE—Scientists can now manufacture animal growth hormones through rDNA technology. Lab studies have shown these hormones to have great promise for increasing the efficiency of milk production and meat production in hogs and beef cattle. This new study looks at how these hormones could impact on feed markets, commodity programs, international trade, and domestic competitiveness. The study will be used as a tool to help USDA senior officials make important decisions concerning allocation of resources. It will also be made available to the public as soon as it has cleared the Department.



BIOTECHNOLOGY AT THE FOREST SERVICE-The Forest Service's biotechnology program is aimed at demonstrating the current use of biotechnology techniques with improving woody plants. This has included transformation experiments, the development of somaclonal techniques, and gene mapping.

To date, the first genetically engineered tree has been constructed, the first gene in a woody plant has been mapped, and the Agency has field screened the first somaclonal selections of a woody plant.

CROP GENETICS AWAITS APPROVAL—Crop Genetics International, Dorsey, Md. is awaiting final approval from EPA, APHIS, and ARS's Biosafety Committee to proceed with field trials using a genetically engineered bacterium that is designed to make the corn plant resistant to the European corn borer. This would be one of the first crops with built—in pesticidal bacteria. Field trials in the United States would take place in Beltsville, Md. and the Eastern Shore of Maryland.

NORTHEAST REGIONAL CONFERENCE A SUCCESS--"Agricultural Biotechnology and the Public" is the theme of a series of four regional conferences sponsored by USDA, the Land Grant Universities, State Agricultural Experiment Stations, and the Cooperative Extension Services. The last conference was held in New Brunswick, N.J., and brought together about 150 scientists, government officials, industry representatives, and the media. Check "Calendar of Events" for information about the fourth -- and last -- conference.

BIOTECHNOLOGY RESEARCH GUIDELINES UPDATE--USDA is developing research guidelines for agricultural researchers who utilize techniques such as recombinant DNA in their research. The research guidelines are necessary because the existing biotechnology research guidelines, developed by the National Institutes of Health for biomedical research, do not cover many agricultural applications. USDA plans to publish the guidelines in the Federal Register for public comment. USDA also plans to develop a more detailed manual of procedures and recommended practices for agricultural researchers to follow.

SENATE BILL S1966 UPDATE: Senate bill S1966, also known as the "Biotechnology Competitiveness Act of 1987," would amend the Public Health Service Act by creating a National Center for Biotechnology Information to be housed at the National Library of Medicine on the campus of the National Institutes of Health. The bill would also create a National Biotechnology Policy Board and Advisory Panel, comprised of Directors of the NIH, National Science Foundation, the Secretary of Agriculture, the Secretary of Commerce, the Secretary of Defense,



the Secretary of Energy, the Commissioner of the FDA, the Administrator of EPA, the Director of the Office of Science and Technology Policy, and the Director of the Office of Management and Budget. Other representatives from industry, academia, philanthropic groups, and the field of ethics would also serve on the Board. The bill would also establish a National Advisory Panel on the Human Genome. The language of the proposed legislation is confined to the public health and biomedical area with no reference to agricultural and environmental applications.

The bill was referred to the Senate Committee on Labor and Human Resources in December 1987, marked up last month, and is now waiting to be placed on the calendar for full Senate consideration.

UP CLOSE: CSRS'S OFFICE OF GRANTS AND PROGRAM SYSTEMS--The Office of Grants and Program Systems was a separate USDA agency until 1985 when it was brought under the CSRS umbrella. Acting Associate Administrator, Dr. William D. Carlson, administers the Competitive Research Grants Office, the Office of Higher Education, Grants Administrative Management Office, Special Programs, the User's Advisory Board, and the Joint Council.

The Competitive Research Grant's Office manages a nearly \$20 million biotechnology grant budget. According to Dr. Carlson, most of the grants are awarded to universities, although Federal laboratories, individuals or companies — large or small — may compete for the research dollars.

The Department has requested increased funding in the biotechnology grants area for FY '89, said Dr. Carlson. In addition, the Department recommended \$7.4 million for next fiscal year for studying the impact of ozone depletion on the environment and funds to support plant science centers around the country.

CALENDAR OF MEETINGS FOR MAY:

May 8-13: 88th Annual Meeting of the American Society for Microbiology. Miami Beach, Fla. Contact: Janet Shoemaker, (202) 833-9680.

May 10-12: Biotech '88. London, England. Contact: Heather Mills, Ash Hill Drive, Pinner Middlesex, United Kingdom HA52AE.

May 16-18: "Agricultural Biotechnology and the Public." Minneapolis, Minn. Contact: USDA, Office of Public Liaison, (202) 447-2798.

May 22-26: 54th Annual Meeting of the American Society of Brewery Chemists. Minneapolis, Minn. Contact: Susan Rasmussen, Mail #BC600, Golden, Colorado 80401.

